

CLAIMS:

sub BC
1. A low-pressure mercury-vapor discharge lamp comprising a discharge vessel (10),

which discharge vessel (10) encloses a discharge space (11) provided with a filling of mercury and an inert gas in a gastight manner,

5 which discharge vessel (10) contains an amalgam (63) which communicates with the discharge space (11),

and the low-pressure mercury-vapor discharge lamp comprises discharge means (41a, 41b) for maintaining an electric discharge in the discharge space (11), characterized in that the amalgam (63) comprises a bismuth-lead compound having a lead content (Pb) in the range between $35 \leq \text{Pb} \leq 60$ at.%, a bismuth content (Bi) in the range between $40 \leq \text{Bi} \leq 65$ at.%, and a mercury content (Hg) in the range between $0.05 \leq \text{Hg} \leq 1$ at.%.

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15 2. A low-pressure mercury-vapor discharge lamp as claimed in claim 1, characterized in that the lead content lies in the range between $40 \leq \text{Pb} \leq 50$ at.%, and the bismuth content lies in the range between $50 \leq \text{Bi} \leq 60$ at.%.

sub A1
20 3. A low-pressure mercury-vapor discharge lamp as claimed in claim 1 or 2, characterized in that the amalgam (63) further comprises gold, the gold content (Au) lying in the range between $0.1 \leq \text{Au} \leq 20$ at.%.

4. A low-pressure mercury-vapor discharge lamp as claimed in claim 1, characterized in that the gold content lies in the range between $8 \leq \text{Au} \leq 12$ at.%.

sub A2
25 5. A low-pressure mercury-vapor discharge lamp as claimed in claim 1 or 2, characterized in that the mercury content (Hg) lies in the range between 0.05 and 0.75 at.% Hg.
sub A3
Cht

6.

An amalgam for use in a low-pressure mercury-vapor discharge lamp as claimed in claim 1 or 2.

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